Annual Drinking Water Quality Report 2016

CITY OF FAIRMONT WATER DEPARTMENT P. O. Box 1428

Fairmont, WV 26555-1428

Fairmont PWS# WV3302502, Rayford Acres PWS# 3302529

March 1, 2017

Why am I receiving this report?

In compliance with the Safe Drinking Water Act Amendments, the **City of Fairmont Water Department** is providing its customers with this annual water quality report. This report explains where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. The information in this report shows the results of our monitoring for the period of January 1st to December 31st, 2016 or earlier if not on a yearly schedule.

If you have any questions concerning this report, you may contact David C. Sago, Utility Manager, 304-366- 6231. If you have any further questions, comments or suggestions, please attend any of our regularly scheduled water board meetings held on the 4th Thursday of every month at 3:00 PM in the E. Bruce McDaniel Complex, "Morris Park" Fairmont, WV.

Where does my water come from?

Your drinking water is surface water from the Tygart River. Rayford Acres purchases water from Little Creek PSD.

Source Water Assessment

A Source Water Assessment was conducted by the West Virginia Bureau for Public Health (WVBPH). The intake that supplies drinking water to the **City of Fairmont Water Department** has a higher susceptibility to contamination, due to the sensitive nature of surface water supplies and the potential contaminant sources identified within the area. This does not mean that this intake will become contaminated only that conditions are such that the surface water could be impacted by a potential contaminant source. Future contamination may be avoided by implementing protective measures. The source water assessment report which contains more information is available for review or a copy will be provided to you at our office during business hours or from the WVBPH 304-558-2981.

Why must water be treated?

All drinking water contains various amounts and kinds of contaminants. Federal and state regulations establish limits, controls, and treatment practices to minimize these contaminants and to reduce any subsequent health effects.

Contaminants in Water

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits of contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The source of drinking water (both tap and bottled water) includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally-occurring minerals, and, in some cases radioactive material and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial contaminants: viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring, or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants, this can be naturally-occurring or the result of oil and gas production and mining activities.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Water Quality Data Table

Definitions of terms and abbreviations used in the table or report:

- MCLG Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health.
 MCLGs allow for a margin of safety.
- MCL Maximum Contaminant Level or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technique.
- MRDLG Maximum Residual Disinfectant Level Goal, or the level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect benefits of use of disinfectants to control microbial contaminants.
- MRDL Maximum Residual Disinfectant Level, or the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition
 of disinfectant is necessary to control microbial contaminants.
- AL Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow
- TT -Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.

Abbreviations that may be found in the table:

- pCi/l picocuries per liter
- ppm parts per million or milligrams per liter
- ppb parts per billion or micrograms per liter
- NA not applicable
- NE not established
- NTU –Nephelometric Turbidity Unit, used to measure cloudiness in water

The City of Fairmont Water Department routinely monitors for contaminants in your drinking water according to federal and state laws. The tables below show the results of our monitoring for contaminants.

 $\underline{\textbf{Table of Test Results - Regulated Contaminants - City of Fairmont Water Department}}$

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Turbidity	N	0.070 100% of monthly samples <0.3	NTU	0	TT	Soil runoff
Inorganic Contaminants						
Copper* Fairmont Rayford Acres	N	0.106 0.0738	ppm	1.3	AL=3	Corrosion of household plumbing
Fluoride	N	0.74	ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth
Lead* Fairmont Rayford Acres	N	4.0 0.5	ppb	0	AL=15	Corrosion of household plumbing
Nitrate	N	0.32	ppm	10	10	Runoff from fertilizer use; leakage from septic tanks, sewage; erosion of natural deposits
Radioactive Contaminants						
Gross alpha	N	0.105	pCi/l	0	15	Erosion of natural deposits
Uranium 238	N	0.108	ppb	0	30	Erosion of natural deposits
Combined radium (226 & 228)	N	0.457	pCi/l	0	5	Erosion of natural deposits
Volatile Organic Contaminants						
Chlorine Fairmont Rayford Acres Fairmont Rayford Acres	N	Annual avg. 1.52 1.10 Range 1.5-1.7 .02-1.8	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes
Haloacetic acids (HAA5) Site 1 Site 2 Site 3 Site 4 Site 1 Site 2 Site 3 Site 3 Site 4	N	Annual avg. 36 45 38 36 Range 24-59 28-65 24-54 18-59	ppb	NA	60	By-product of drinking water disinfection

Total trihalomethanes(TTHMs)	N	Annual avg.	ppb	NA	80	By-product of drinking water chlorination
Site 1		33	PPO	1,11		2) product of dimming water emormation
Site 2		50				
Site 3		34				
Site 4		36				
		Range				
Site 1		17-57				
Site 2		25-80				
Site 3		22-50				
Site 4		15-59				

^{*}Copper and lead samples were collected from 30 Fairmont area residences and 5 Rayford Acres area residences on June 6, 2016. Only the 90th percentile is reported. None of the samples exceeded the MCL.

Unregulated Contaminants,

The Fairmont Water Board conducted monitoring of contaminants included in the unregulated contaminant monitoring rule 3 (UCMR3) 2013 issued by the USEPA. Unregulated contaminants are those that don't yet have a drinking water standard set by USEPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. The Fairmont Water boards tested for 30 contaminants, only 4 contaminants were detected. The mandated test sites are the effluent from the water treatment plant and the MRT (Maximum Residence Time). The four contaminants are grouped accordingly.

Water Treatment Plant Effluent (Entry point to distribution system)		MRT (Maximum Residence Time)				
Contaminant:	Result:	Contaminant:	Result:			
Chromium	0.29 ppb	Chromium	0.33 ppb			
Strontium	64.7 ppb	Strontium	72.3 ppb			
Chromium Hexavalent	0.067 ppb	Chromium Hexavalent	0.060 ppb			
Chlorate	38.8 ppb	Chlorate	45.2 ppb			

WE ARE PLEASED TO REPORT THAT THE CITY OF FAIRMONT WATER DEPARTMENT MET ALL FEDERAL AND STATE WATER STANDARDS FOR THE REPORTING YEAR 2016.

Additional Information:

All other water test results for the reporting year 2016 were all non-detects.

Turbidity is a measure of the cloudiness in water. We monitor it because it is a good indicator of the effectiveness of our filters.

If present, elevated levels of **lead** can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Fairmont Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

PLEASE SHARE THIS REPORT WITH OTHER PEOPLE WHO DRINK THIS WATER, ESPECIALLY THOSE WHO DO NOT RECEIVE THIS INFORMATION DIRECTLY. (EXAMPLE: RESIDENTS IN APARTMENT BUILDINGS, NURSING HOMES, SCHOOLS AND BUSINESSES.)

This report is also available on our website at www.fairmontwv.gov.